



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,285	12/05/2001	Hideto Miyazaki	0925-0190P-SP	2135
2292	7590	06/09/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			ZEWDU, MELESS NMN	
		ART UNIT		PAPER NUMBER
				2683

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/002,285	MIYAZAKI ET AL.	
	<b>Examiner</b> Meless N. Zewdu	<b>Art Unit</b> 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 January 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. This action is in response to the communication filed on 01/21/05.
2. Claims 1-15 are pending in this action.
3. This action is final.

### ***Claim Objections***

Claims 1-15 are objected to because of the following informalities: the claims are presented in their previous without claim status indicator/markings (i.e. original, currently amended, etc.) as required. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siddiqui et al. (Siddiqui) (6,292,666) in view of Sykas et al. (0-8186-7852-6/97, 1997 IEEE).

Regarding claim 1, Siddiqui et al. discloses a radio communication device (abstract, fig.

- 1) comprising:

a) a position detector for detecting the current position of a radio communication device (determine the current country) (abstract, fig. 1-6, col. 1 line 16 thru col. 2 line 56);

b) a memory for storing information of a domain and radio communication system information corresponding of said domain (#27 fig. 3, col. 4 line 9 thru col. 6 line 40). However, Siddiqui et al. does not specifically disclose a selection unit for selecting a radio communication system corresponding to said domain, to which said current position belongs, on the basis of said current position detected by said position detector, said domain information stored in said memory and the radio communication system information corresponding to said domain, and a radio communication unit for performing at least transmissions on the basis of said radio communication system selected by said selection unit.

However, in a related field of endeavor, Sykas teaches about a universal mobile communication system (UMTS) wherein a mobile terminal (MT) in a roaming operation, first scans and then, selects a domain either in a manual mode or automatic mode, and wherein once, the selection is made, the MT utilizes the newly selected domain (operator) radio resources (see entire document, particularly, page 626, col. 2, paragraph 1 –page 627, col. 2, paragraph 7; page 628, paragraphs 4-5; page 629, paragraph 4). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the teaching of Siddiqui with that of Sykas for the advantage of allowing a roaming terminal to select a desirable operator among the available (see abstract).

Regarding claim 2, Siddiqui et al. further discloses a radio communication device according to claim 1, wherein said domain information are country domain information or administrative division domain information in individual countries (abstract, fig. 3-6, col. 5 lines 18-60).

Regarding claim 3, Siddiqui et al. further discloses a radio communication device according to claim 1, further comprising an output unit for outputting, when said radio communication system is to be changed, predetermined information on the change of said radio communication system (new country and warning are displayed on MS prior to update location) (abstract, fig. 1-6, col. 1 line 16 thru col. 2 line 55, and col. 5 line 18 thru col. 7 line 9).

Regarding claim 4, Siddiqui et al. further discloses a radio communication device according to claim 1, wherein said radio communication unit includes an information transmission unit for transmitting, when said radio communication system is to be changed to a different radio communication system, information for promoting the change to said different radio communication system, to the other end unit in radio communications (col. 4 line 9 thru col. 6 line 11).

Regarding claim 5, Siddiqui et al. further discloses a radio communication device according to claim 4, further comprising an output unit for outputting, when said radio communication system is to be changed, information of the other end unit on the change of said radio communication system (fig. 3-6, col. 5 line 18 thru col. 7 line 9).

Regarding claim 6, Siddiqui et al. further discloses a radio communication device according to claim 1, further comprising an update unit for updating the domain

information, as stored in said memory, and the radio communication system information corresponding to said domain, on the basis of update information received by said radio communication unit (col. 5 line 50 thru col. 6 line 57).

Regarding claim 7, Siddiqui et al. further discloses a radio communication device according to claim 1, further comprising an update unit for updating the domain information, as stored in said memory, and the radio communication system information corresponding to said domain, on the basis of update information stored in a removable memory medium (#27 fig. 3, col. 4 lines 9-30).

Regarding claim 8, Siddiqui et al. further discloses a radio communication device according to claim 7, wherein said removable memory medium is a memory disk or a memory card (#27 fig. 3, col. 4 lines 9-30).

Regarding claim 9, Siddiqui et al. further discloses a radio communication device according to claim 1, wherein said radio communication device is carried on a mover, and wherein said position detector utilizes the current position information of said mover, as obtained from a navigation system (col. 1 lines 16-30, and col. 4 line 31 thru col. 5 line 17).

**As per claim 11:** a system for changing wireless communication system, comprising:

a detector to detect current position of a wireless terminal (determine the current country) (abstract, fig. 1-6, col. 1 line 16 thru col. 2 line 56);  
a memory to store information regarding a plurality of wireless communication system, each corresponding to a particular area (#27 fig. 3, col. 4 line 9 thru col. 6 line 40). Different countries have different communication systems.

said wireless terminal to operate based on the wireless radio communication system reads on '666 (see col. 6, lines 12-57). The old and new (first and second) countries, in the prior art, can be considered as different radio communication systems since different countries are known to use different radio communication systems/standards.

But, Siddiqui does not specifically disclose a selection unit to select a first wireless communication system corresponding to a communication area associated with the current position of the wireless terminal, wherein said selection unit to select and change from said first wireless communication system to an alternative wireless communication system corresponding to a different communication area in response to said detector detecting said wireless terminal preparing to enter said different communication area, as claimed by applicant.

However, in a related field of endeavor, Sykas teaches about a universal mobile communication system (UMTS) wherein a mobile terminal (MT) in a roaming operation, first scans and then, selects a domain either in a manual mode or automatic mode, and wherein once, the selection is made, the MT utilizes the newly selected domain (operator) radio resources (see entire document, particularly, page 626, col. 2, paragraph 1 –page 627, col. 2, paragraph 7; page 628, paragraphs 4-5; page 629, paragraph 4). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the teaching of Siddiqui with that of Sykas for the advantage of allowing a roaming terminal to select a desirable operator among the available (see abstract).

**As per claim 13:** the system further comprising:

A display to display information to a user regarding said change from the first wireless communication system to the alternative wireless communication system reads on 'Sykas (see page 628, paragraph 5).

**As per claim 15:** a method of changing wireless communication system, comprising:

Detecting a current position of a wireless terminal (determine the current country) reads on '666 (abstract, fig. 1-6, col. 1 line 16 thru col. 2 line 56);

Providing information regarding a plurality of wireless communication systems, each corresponding to a particular communication area (#27 fig. 3, col. 4 line 9 thru col. 6 line 40). Different countries have different communication systems.

But, Siddiqui does not specifically disclose selecting a first wireless communication system corresponding to a communication area associated with the current position of the wireless terminal for operation of said wireless terminal; selecting and changing, for continued operation of said wireless terminal, from said first wireless communication system to an alternative wireless communication system corresponding to a different communication area in response to detecting said wireless terminal preparing to enter said different communication area; and displaying information to a user regarding said change from the first wireless communication system to an alternative wireless communication system, as claimed by applicant. wherein said selection unit to select and change from said first wireless communication system to an alternative wireless communication system corresponding to a different communication area in response to said detector detecting said wireless terminal

preparing to enter said different communication area, as claimed by applicant. The claim, in short calls for, a system for enabling a wireless terminal acquire/select location based communication services and displays information associated with different service areas, as the wireless terminal roams across different communication systems covering different geographic areas.

However, in a related field of endeavor, Sykas teaches about a universal mobile communication system (UMTS) wherein a mobile terminal (MT) in a roaming operation, first scans and then, selects a domain either in a manual mode or automatic mode, and wherein once, the selection is made, the MT utilizes the newly selected domain (operator) radio resources, including displaying of information associated with a communication area/domain (see entire document, particularly, page 626, col. 2, paragraph 1 –page 627, col. 2, paragraph 7; page 628, paragraphs 4-5; page 629, paragraph 4). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the teaching of Siddiqui with that of Sykas for the advantage of allowing a roaming terminal to select a desirable operator among the available (see abstract).

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siddiqui in view of Sykas (0-8186-7852-6/97, 1997 IEEE) and further in view of Halminen (6,477,378).

Regarding claim 10, in the modied Siddiqui et al. system, Siddiqui further discloses a radio communication device according to claim 1, the radio communication

system. However, Siddiqui et al. does not specifically disclose the radio communication system is a Bluetooth radio communication system.

Halminen teaches the radio communication system is a Bluetooth radio communication system (fig. 1, and 3-5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the Siddiqui et al. system with the teaching of Halminen of Bluetooth communication in order to communicate in short range for low power radio frequency.

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siddiqui in view of Sykas as applied to claims 11 and 13 above, and further in view of Kimoto et al. (Kimoto) (US 6,115,611).

**As per claim 12:** the combined teaching of Siddiqui in view of Sykas include a mobile terminal capable of, operating in different wireless communication systems, capable of detecting (using GPS) its current location and displaying service provider information associated with the current location. Also, examiner considers that the mobile terminal (MT) of the prior art could include a vehicle since it is a mobile terminal, by definition, includes vehicles (see Newton's Telecom Dictionary). But, Siddiqui in view of Sykas do not explicitly teach about a location detector being mounted in a vehicle, as claimed by applicant. However, in a related field of endeavor, Kimoto teaches that a location detector (GPS) can be mounted in a vehicle to provide location information and display this information on a display device provided in the vehicle (see abstract; fig. 1, element 11; col. 1, lines 15-26; summary, particularly col. 2, line 53-col. 3, line 52; col. 3, line 11-col. 5, line 17). Therefore, it would have been obvious for one of ordinary skill in the art

at the time the invention was made to modify the above references with the teaching of Kimoto for the advantage of providing mobile terminals with location map information/data (see col. 1, lines 9-13).

**As per claim 14:** the system wherein said display is being mounted in vehicle reads on '661 (see abstract; col. 2, line 53-col. 3, line 52; col. 3, line 11-col. 5, line 17).

### ***Response to Arguments***

Applicant's arguments filed 01/21/05 have been fully considered but they are not persuasive. Applicant's arguments and examiner's responses are presented in the following manner.

**Argument I:** with regard to claim 1, applicant argues by saying "Siddiqui only teaches obtaining a position location, Siddiqui does not teach or suggest, as recognized in the Office Action, selecting a radio communication based on positioning, let alone positioning, domain information and radio communication system information correlating to the domain information.

**Response I:** examiner agrees. Siddiqui does not explicitly teach about selection based on domain information, as claimed and argued by applicant. These features are taught by Sykas, as discussed in the body the rejection of claim 1.

**Argument II:** with regard to claim 1, applicant argues by saying "thus the teaching of sykas, selection is based on operator availability in a particular area, not on position,

stored domain information and radio communication system information corresponding to the domain as in the present invention."

**Response II:** examiner respectfully disagrees with the argument. In that, respectfully disagrees with the argument. First, regarding the question of selection based on availability, the claims do not include selection based on unavailability. In other words, only what is available can be selected. Second, selecting the desirable operator, in Sykas, is other way of saying selecting desirable domain or radio communication service provider for a roaming user (see abstract). Furthermore, Sykas also teaches a list (stored list) of available operators (AOL) (see page 628, section 3.3). Also taught by Sykas is that the location of a user having multiple subscriptions is tracked by all the corresponding Home operators (see page 627, section 3.2). In conclusion, Sykas teaches about storing domain information (list of available operators), selection of a desirable operator (domain) based on availability, and tracking the location of users by corresponding Home operators. Hence, the argument is moot.

**Argument III:** with regard to claim 11, applicant argues by saying "simply stated the combination of Siddiqui and Sykas fail to teach or suggest selecting a communication system based on a position of a wireless terminal. Furthermore, Siddiqui and Sykas fail to teach or suggest a memory to store information regarding a plurality of wireless communication systems, each corresponding to a particular communication area.

**Response III:** examiner respectfully disagrees. In that selecting a communication system based on a position of a wireless terminal is taught by Sykas as discussed above. Furthermore, Sykas, as discussed above, also teach about storing list of

available operators (see also indexes 1-3, on page 628). In fact, sykas stored list advantageously includes list of forbidden environment. The list is a stored information corresponding to domains or service providers each of which correspond to different coverage area. Hence, the argument is not persuasive.

**Argument IV:** with regard to claim 11, applicant further argues by saying the mobile terminal does not provide a memory for storing a plurality of wireless communication systems for particular communication areas.

**Response IV:** this argument is a repetition. Please refer to the immediate above response.

**Argument V:** still with regard to claim 11, applicant further argues by saying "Siddiqui and Sykas do not teach or suggest a selection unit and a wireless terminal as being physically distinct.

**Response V:** examiner disagrees with the argument. In that Sykas teaches operator/domain selection by a roaming wireless terminal. It means the roaming terminal includes a selection unit. Whether the selection unit is distinct from the mobile terminal does not carry patentable weight, as long as selection is made. If applicant feels on the contrary, he/she need to show criticality as to why the selection unit should be distinct from the terminal, as claimed and argued. Therefore, examiner did not find this argument convincing.

**Argument VI:** most features applicant argues about, regarding claim 15, are similar to those provided in the above arguments to which corresponding responses have been provided by examiner. However further argues that "the combination of Siddiqui and

Sykas fails to teach displaying information to a user regarding said change from the first wireless communication to the alternative wireless communication system, as recited in claim 15."

**Response VI:** examiner respectfully disagrees with the argument. In Sykas teaches about wireless domain selection, based on available operators list, corresponding the current position of a mobile unit (see pages 627-628, sections 3.2-3.3). A "change from a first wireless communication system to an alternative wireless communication system" is obvious from domain selection, based on available operator list (AOL). The difference appears to be mere semantic. Hence, the argument is not convincing.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

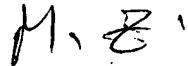
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Meless Zewdu



Examiner

03 June 2005.



WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600